# Elgin Joliet and Eastern Railway Company 135 Jamison Lane P. O. Box 68 Monroeville, PA 15146

April 23, 1999

### BY MESSENGER DELIVERY AND BY FAX (312) 353-1155

Ms. Janet Pope Community Involvement Coordinator Office of Public Affairs (P-19J) U.S. EPA - Region 5 77 W. Jackson Blvd. Chicago, IL 60604

Re: Comments on the Proposed Plan for the Outboard
Marine Company/Waukegan Coke Plant Site

Dear Ms. Pope:

These comments are submitted on behalf of the Elgin, Joliet and Eastern Railway Company ("EJ&E"). In 1990, the United States Environmental Protection Agency, through Mr. Sean Mulroney, Assistant Regional Counsel, informed counsel for the EJ&E that it would not receive a special notice letter for remedial investigation of the Waukegan Coke Plant Site. At a recent public meeting in Waukegan, Illinois, on March 3, 1999, Mr. Michael Bellot, Project Manager for Remediation, said that the EJ&E would receive a special notice letter for remediation of the site. However, there is no basis in the record of the remedial investigation and supplemental studies to name the EJ&E as a responsible party for the remediation set out in the proposed plan, and these comments are filed in support of the EJ&E's position that should not be served with a special notice letter for remediation of this site.

#### BACKGROUND INFORMATION

Shortly after the turn of the century, the EJ&E leased an area on the western portion of the present site to Chicago Tie and Timber Company ("CT&T"). CT&T treated wood with creosote. The eastern portion of the property was not in existence at that time.

The EJ&E never operated the site, and its lease to CT&T is its only connection to any of the environmental matters discussed in the proposed plan. There is little if any information available regarding CT&T's actual operation or the quantity of wood treated during its lease of the western portion of the site. It should also be noted that the dock retaining wall on the western edge of the present site has steel sheet piling extending from ground level twenty-six or more feet below grade which would prevent contamination, if any, from entering the harbor on that side of the property.

The EJ&E sold the site to North Shore Coke & Chemical Company in 1926, and North Shore Gas Company purchased the assets of North Shore Coke & Chemical Company in 1941. Manufactured gas operations began at this site in approximately 1927, and the entire site was used for the manufactured gas operation. Aerial and ground level photographs show that the manufactured gas process area, including plant equipment and holding ponds, were situated on the eastern half of the site while the western half of the site was used to store large quantities of coal for use in the manufactured gas process. A quenching station for the purpose of dousing hot coke with water was located near the middle of the property, slightly north of center.

Information provided by North Shore Gas Company in a lawsuit filed against its insurers discloses that "at least 24,395,659 million cubic feet of gas" was produced on this site during the period from 1927 through approximately 1947 by using the method of gas manufacturing commonly known as coal carbonization. According to North Shore Gas Company, by-products of the manufactured gas process may have included tar, breeze, drip oil, light oils, ammonia, ammonium sulfate, naphthalene, and sulfur. North Shore Gas Company stated in its 10K filings with the Securities and Exchange Commission that some of its by-products and waste materials may have been disposed of rather than sold, and the USEPA's proposed plan identifies coal tar, sludges, arsenic, Polynuclear Aromatic Hydrocarbons (PAHs), phenols, volatile aromatics, thiocyanate and ammonia as contaminants from the manufactured gas plant that have impacted soil and/or groundwater at the site.

A number of manufactured gas plant sites owned by the North Shore Gas Company or The Peoples Gas, Light and Coke Company, a related corporation, are the subject of environmental

investigations and/or clean-ups as a result of contamination due to the manufactured gas process. The North Shore Gas Company's 10K filings disclose that it is recovering costs of environmental activities relating to its former manufactured gas operations, including carrying charges on the unrecovered balances, under a rate mechanism approved by the Illinois Commerce Commission.

The site was purchased in 1947 by General Motors Corporation. The new owner used the site to manufacture coke for the period from 1947 until sometime prior to the sale of the site in 1971 to Outboard Marine Corporation, the present owner. The coke manufacturing process was similar to the manufactured gas process except that coke was the product rather than the by-product. During the ownership of General Motors, the primary function of the plant was to supply coke for a foundry in Saginaw, Michigan. The coking operations were similar to the manufactured gas process operation using the coal carbonization process, except that gas produced during the coking process is not necessarily purified or retained for distribution. The plant was operated as a coke production facility for about twenty-four years.

The record demonstrates that the contamination addressed by the proposed plan is the result of the manufacture of gas by North Shore Gas Company and its predecessor, and the manufacture of coke by General Motors Corporation. The following comments are in support of the EJ&E's position that it is not responsible for the contamination driving the proposed plan, and that the risk assessment results do not support the conclusion that active remediation is required at this site.

## 1. The CT&T wood-treating operations were not consequential contributors to the reported groundwater contamination.

The RI Report (Barr, February 1995, p. 205) concludes as follows:

"The presence of significantly higher concentrations in the deep portions of the sand aquifer is most likely related to historic site operations including discharges from the wood-treating plant, the manufactured gas plant, and the coke plant, as well as activities associated with the demolition of these facilities by OMC."

However, supplemental sampling and data analysis

activities which occurred after the RI resulted in a refinement of the site conceptual model. These refinements include the following:

- Groundwater modeling results indicate that historical discharges near the groundwater divide (along with site hydraulics, natural flushing, and shallow aerobic biodegradation) account for the current distribution of contaminants in the deeper portion of the aquifer (Barr, 1998, FS Report, p. 2-12). The locations of the discharges, as illustrated on Figure 2-C-1, are the ponds associated with the manufactured gas and coke plant operations.
- Significantly, Barr (1998) identifies as the source of the current groundwater contamination aqueous discharges at the site from completion of plant construction in 1928 until site grading after plant demolition in 1972.
- The chemistry of the deeper portion of the aquifer was found to be similar to aqueous effluent from coal conversion plant operations (*ibid.*, p. 2-13)

The CT&T wood-treating operations could not have contributed to these discharges cited by Barr for the following reasons:

- CT&T only operated the wood-treating facility between 1908 to 1912; the wood-treating plant was demolished some time after 1917 (Barr, 1995, RI Report, p. 7), and it was replaced by the coal pile for the manufactured gas plant. Demolition occurred before the discharges to the ponds began in 1928.
- During the operation of the wood-treating facility, the ponds were non-existent. The sites that eventually became the ponds that were the sources of the aqueous discharges were east of the then Lake Michigan shoreline i.e., in the lake (Barr, 1998, FS Report, Figure 2-A-2, 1908 shoreline).
- 2. The CT&T wood-treating facility operations are not associated with the PAH- and arsenic-contaminated soils proposed for excavation (Figure 2, Proposed Plan).

> The Proposed Plan (U.S. EPA, February 1999, p. 2) states that "soil at the site is contaminated with coal tar and arsenic as a result of on-site gas manufacturing and creosote from the wood treatment processes." The PAH- and arsenic-contaminated soil shown on Figure 2 of the Proposed Plan is located east of the location of the former wood-treating plant and in proximity to the manufactured gas and coke plant process operations or associated loading/unloading facilities, not the wood-treating Furthermore, the sites of most of the soil targeted for remediation did not exist at the time of the operation of the wood-treating plaint. Those areas were in Lake Michigan at the time of the wood-treating plant operations, and could not have contributed to the PAH contamination. The soil that is identified for remediation on Figure 2 is a result of the manufactured gas and coke plant operations rather than of the creosote wood-treating process.

3. There is no evidence in the record that the contaminated soil removed from Slip Number 4 was contaminated with creosote rather than coal tar.

The RI Report (Barr, 1995, p. 10) states that designated creosote-contaminated soil was segregated and placed in a membrane-lined cell designed to meet RCRA waste pile guidelines. The criteria for designating the soil that went into the cell were as  $fo_{\perp}lows$  (*ibid.*, p. 15):

- Prior agreement between OMC and the U.S. EPA on the areas from which the soil would be taken
- Carcinogenic PAH concentration over 6 ppm
- On-site observation and selection of contaminated soil by a representative of U.S. EPA.

The RI Report (p. 12) also describes creosote as a "blend of the fractional distillates of coal tar...[that] may be diluted with coal tar..."

The criteria for designating the creosote-contaminated soil removed from Slip Number 4 are equally applicable to soil contaminated with coal tar. Furthermore, the PAH-contaminated

soil mapped adjacent to Slip Number 4 on Figure 7.6-2 of the RI Report is located at a point that was east of the wood-treating operations and on the shoreline of, or in, Lake Michigan at the time of the wood-treating operations. The PAHs are adjacent to the gas and coke plant and could be the result of releases during loading coal tar for outbound shipment. This area is also coincident with a low spot in the till surface (see RI Report Figure 5.1-5) that can be connected to a PAH-contaminated soil/low spot in the till area beneath the manufactured gas and coke plant process area and may be part of a larger coal tar release to the subsurface that is typical of manufactured gas plant sites.

4. The risk assessment results presented in the Proposed Plan do not support the conclusion that the contamination presents a health hazard that requires active remediation.

The excess cancer risk estimate that generally requires remediation under U.S. EPA guidance is 1 x  $10^{-4}$ . Risks estimated as lower than  $10^{-6}$  do not require remediation; risks between  $10^{-4}$  and  $10^{-6}$  are in the "acceptable range" for Superfund sites. According to U.S. EPA guidance (1995), these risks are to be estimated for current and reasonably likely future land use.

The estimated excess cancer risks for this site were only outside of the "acceptable range" for residential land use scenarios, but residential land use is not a reasonably likely future land use for this site.

The noncancer risk associated with subsistence fishing/ingestion exceeded the acceptable Hazard Index of 1.0; but, according to the footnote to the risk summary table, this is likely an overestimate. Appendix 3-D of the Feasibility Study illustrates the magnitude of the overestimate by revising the risk calculations for fish consumption based on a "Great Lakes specific" fish consumption rate and on a median (rather than upper-bound) exposure duration value. Either of these approaches would lower the Hazard Index for the subsistence fishing/ingestion scenarios to less than 1.0.

5. The Remedial Action Objectives are overly cautious or are addressed by alternatives that are overly aggressive, based on site risks. Remedial Action Objectives that allow the use of

## a "Limited Action" Alternative that includes institutional controls should be seriously considered.

The Remedial Action Objectives for soil are based on a  $10^{-6}$  risk and on protecting shallow groundwater to Illinois EPA Class 1 standards (Barr, Nov. 1998, FS Report, p. 3-1 and 3-7). A  $10^{-4}$  to  $10^{-6}$  risk range along with groundwater use restrictions would be more appropriate for this site considering its industrial land use.

The Remedial Action Objectives for groundwater include reducing the mass flux of dissolved constituents to the harbor and breakwater, even though the FS analysis "shows that maintaining the mass flux...is protective of surface water quality" in order to "provide an additional factor of safety" (ibid., p. 3-13). The remedy, a pump-and-treat system, is unduly costly if the No Action alternative for groundwater is already protective of surface water that receives the groundwater. A Limited Action Alternative could be sufficient to provide a factor of safety.

### CONCLUSION

The information and data contained in the USEPA remedial investigation record and supplemental studies do not warrant or support the naming of the EJ&E as a potentially responsible party for the remediation set out in the proposed plan. Instead the record strongly suggests that the cause of the environmental concerns at this site are the manufactured gas plant and the coke plant which succeeded it. The EJ&E is not responsible for the contamination that the proposed plan is intended to treat and should be deleted from the list of responsible parties.

ELGIN, JOLIET & EASTERN RAILWAY COMPA<u>N</u>Y

Bv. •

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#### References

- Barr Engineering Company. February 1995. Remedial Investigation Report, Waukegan Manufactured Gas and Coke Plant Site, Waukegan, Illinois. Prepared for North Shore Gas Company.
  - Barr Engineering Company. November 6, 1998. Feasibility Study, Waukegan Manufactured Gas and Coke Plant Site, Waukegan, Illinois. Prepared for North Shore Gas and General Motors Corporation.
  - U.S. EPA. 1995. May 25, 1995. Land Use in the CERCLA Remedy Selection Process, OSWER Directive 9355.7-04.
  - U.S.EPA. February 1999. Proposed Plan for Clean Up at the Outboard Marine Company/Waukegan Coke Plant Superfund Site, Waukegan, Illinois.